

SPARK GAP

Vol. 32, Issue 9&10, September-October 2015 *MARC - Serving Central Indiana Communities for thirty-two years*

On Our MARC...

My second term as club president came to an end. It has been my pleasure to serve with an outstanding group of officers the past year. I'd like to thank Dave Daily, Rhonda Curtis, Cy Young, and Chris Frederick for a great job. I would also like to thank Matt Payne and the IT Team for working hard on getting our Website up to date, Maryls Barr, Kevin Nuetzman and Rusty Kirts for getting our name out into the public domain, thinking of how to get all the members involved and ways to get old members back. Thanks to Bob LaGrange for serving as Editor-in-Chief of the Spark Gap. Thanks to the membership for all the support that you have given the club. Without you, there would be no MARC.

I'm looking forward to my third term as President. I am also encouraging everyone that if there are things that we didn't get to the past years that you would like to see, please let us know. Also, the PIO's are looking for new ideas for the coming year.

I would like to thank Steve & Jeannie Brown for hosting the picnic again this year. We had lots of great food and stories to tell. Sure glad we had the nice weather and not the cooler weather that we are having now.

For those that didn't attend the picnic, here are your Officers for the current year: President - Jacki Frederick KI6QOG, Vice President - Bruce Tisdale K9ICP, Secretary - Rhonda Curtis WS9H, Treasurer - Cy Young N9CHY and Trustee - Chris Frederick KQ9Y.

The officers will be looking at ways that we can bring back old members, work on getting new members and keeping the current members. We will be discussing topics that the club might like to have presented. If you have any topics that you would like to see presented, please let us know.

Please mark your calendar for Oct 31 for the Goblin patrol. I'm hoping Dave Daily will have more information for us at the meeting. This is a yearly event and the Greenwood Police Department and the Johnson County Sheriff's Department really appreciate our help. And most likely all the car and truck traffic on I-65.

Jacki KI6QOG
President





Birthday for the month of Oct:

AF9SE-Steve Ellis

KC9NJM- Bob Jones

NW9Q-David (Jason) McClellan

KN9C-Rudy Richardson

WV9W-Jim Smith

KC9ZMV-Clifford Whitrock

JOHNSON COUNTY HEARTNUT FESTIVAL 2015

Mid-State ARC members welcomed dozens of visitors to our Heartnut encampment demonstrating Amateur Radio September 12th and 13th. The two day affair saw lots of club members stopping by to talk ham radio, eat hot dogs and enjoy the festival activities. Kevin K9NTZ, Rusty N9LLP and club Prez Jacki KI6QOQ headed up the weekend encampment. Steve KD9Y, Bruce K9ICP, Ron K9THR, Ken KD9ALA and Steve AF9SE provided the HF equipment, tower and antennas.

We experienced great weather all weekend. Our 3-tents and radio demonstrations drew the attention of dozens of visitors. New banners announcing *No Code* and answers on *How to Become A Ham* added interest to the setting.

Many of the club members stopped by to help answer questions, drink coffee, chew the rag and finish off some great hot dogs. With AC power nearby Kevin K9NTZ created a behind the scenes kitchen that keep the coffee, hot dogs and snacks ready for club members.

The event served as another example of how to quickly set up and operate under emergency conditions out in the field.

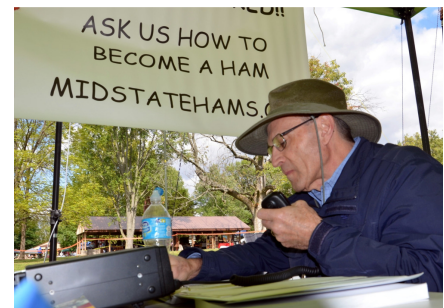
Photos and story by Jack W8ISH and Steve K9DY



Steve K9DY & guest



Heartnut Ham Radio



Ron K9THR making a contact

M.A.R.C. ANNUAL CLUB PICNIC

Our annual MARC picnic got off to a soggy start. Light showers welcomed everyone to the Steve Brown N9LC ranch for another September picnic. Fortunately, the showers gave way to party cloudy skies as several dozen hams and their families lined up for grilled hamburgers, hot dogs and lots of home made side dishes. Steve Brown was kept busy flipping burgers while everyone took shelter in the barn from the light sprinkles.

Following lunch, club president Jacki Frederick, KI6QOG ran through club business and announced the election of Bruce Tisdale K9ICP as Vice President. Jacki starts her third term as president while Rhonda Curtis, WS9H gets to keep the minutes another year as secretary and Cy Young N9CHY continues counting the dues as club treasurer. Chris KQ9Y was retained as club Repeater Trustee. Our thanks to out going club VP Dave Daily, KB9LOT.

A good time was had by all. Many thanks to Steve and Jeannie Brown for again hosting the club picnic.

-Jack w8ish



Steve taking care of burgers



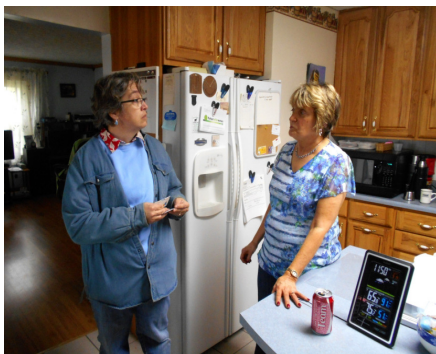
Dave & Cy



Jacki, Cy & Steve



Brenda and the food



Marlys & Jeannie



Mike & his wife



Sam and Fran



Mr. & Mrs. John Wampler

Greenwood Band Event 2015

Perfect fall weather greeted MARC members as they orchestrated parking and traffic control for the 2015 Greenwood Band Invitational. A steady stream of high school bands from across the state came to compete for trophies and bragging rights as being the best marching bands in the state. With them came caravans of semi's, school buses, equipment vans and lots of spectators all looking for a front row parking spot.

It was the mission of our nine club communicators to direct everyone to their proper parking place and answer questions from hundreds of out-of-town guests. Working the front entrance were Rusty-N9LLP, Bob-KB9NJM and Jack-W8ISH. Bruce-K9ICP and Kevin-K9NTZ directed the semi's and school buses into their assigned slots near the football stadium.

Bearing the burden of parking the hundreds of spectators in Woodman Park was Ron-K9THR, Steve-AF9SE, Dave KB9LOT and Jacki-KI6QOG. The back lot is always a challenge to direct incoming and outgoing cars through a narrow gate at the back of the field. Those working the front gate usually get a verbal workout telling visitors who found the school using their Smart Phone map that they will have to pull a U-turn and drive back out to US31 and navigate their way through the neighborhood to the park.

Our thanks to Rusty KIRts-N9LLP for organizing the volunteers while Bob LaGrange-N9SIU was home recuperating from a recent surgery. Everyone who took a lunch or dinner break in the bus driver's hospitality suite gave the food an A-plus. The event ran about eleven hours.

-w8sh



Bob KC9NJM gives directions



Bruce K9ICP guides the busses



Kevin K9NTZ talks traffic

More Chinese Amateur Radio Satellites are Aloft

On the heels of the September 19 launch of nine satellites carrying Amateur Radio payloads comes word that three more satellites were launched on September 25 from the Jiuquan Satellite Launch Center in Inner Mongolia's Gobi Desert. The CubeSats, identified as Tianwang-1A (TW-1A; SECM-1), Tianwang-1B (TW-1B; NJUST-2), and Tianwang-1C (TW-1C; NJFA-1), were developed by students at the Nanjing University of Aeronautics and Astronautics in collaboration with the Shanghai Engineering Center for Microsatellites. TW-1A and TW-1B are 2 U CubeSats, while TW-1C is a 3U CubeSat.

The mission's main goal is to experiment with software defined radio technology in space. The Amateur Radio payloads, which do not include any transponders, will serve to exchange telemetry, tracking, and command information with the ground control station. Telemetry data will be made public, so that radio amateurs around the world may track and monitor the health of the satellites.

Other payloads include a video camera, along with receivers for dual-band GPS/BeiDou, Maritime Automatic Identification System, and Aeronautical Automatic Dependent Surveillance Broadcast. Using MEMS-based cold-gas micro propulsion, it is planned to demonstrate formation flying by two of the CubeSats along with inter-satellite communication using GAMALINK 2.4 GHz spread spectrum technology from Portugal.

According to Michael Chen, BD5RV, of CAMSAT, the satellites have downlinks in the 435-438 MHz Amateur-Satellite Service allocation. TW-1A transmits on 435.645 MHz (GMSK 4800/9600 baud, 10 second transmit interval); TW-1B on 437.645 MHz (GMSK 4800/9600 baud, 20 second transmit interval), and TW-1C on 435.645 MHz (GMSK 4800/9600 baud, 10 second transmit interval). Note that TW-1A and 1C use the same frequency. The satellites also may have downlink frequencies in the VHF range. Read more.

-- Thanks to AMSAT News

Ham radio links Scouts around the world

St. Joseph News-Press and Fox 26 KNPN report on the upcoming Jamboree On The Air which takes place October 17-18

William Coverdell WD0BC, assistant merit badge counselor and member at-large for the local Scouts, said the Jamboree is an annual event that uses ham radio to link members from around the world.

About 1.3 million Scouts from around the world will participate in the event through on-air activities. "Basically, they'll get on amateur radio and talk around the world via ham radio where they use voice or also use CW, which is Morse code," Mr. Coverdell said.

..... Southgate News

ARRL Asks FCC to Clarify that Hams May Modify Non-Amateur Gear for Ham Use:

From ARRL Headquarters
Newington CT October 14, 2015
To all radio amateurs

SB QST ARL ARLB030

ARLB030 ARRL Asks FCC to Clarify that Hams May Modify Non-Amateur Gear for Amateur Use

The ARRL has asked the FCC to make clear that Amateur Radio licensees may modify non-amateur equipment for use on Amateur Radio frequencies. Some hams have expressed concerns that recently proposed rules would inhibit post-sale modification of Wi-Fi equipment, now sometimes altered for use on Amateur Radio frequencies. The ARRL made its point in comments filed on October 8 on a Notice of Proposed Rule Making (NPRM) in ET Docket 15-170 and RM-11673. The proceeding mostly addresses proposed amendments to FCC rules regarding authorization of RF equipment. The NPRM can be found on the web in PDF format at, https://apps.fcc.gov/edocs_public/attachmatch/FCC-15-92A1.pdf.

"The Commission should clarify...that the ability of licensed radio amateurs to modify and adapt non-amateur equipment for use in the Amateur Service is beneficial, is permitted, and is not restricted by any rule of general applicability adopted in this proceeding," the League said in its comments. The ARRL said proposed rules requiring manufacturers to include security features to prevent network devices from being modified were "problematic," to the extent that they would preclude hams from adapting network equipment for ham radio applications.

"The Amateur Radio Service has a very long tradition of modification and adaptation of commercial communications equipment," the ARRL's comments pointed out. Amateur licensees should be permitted to modify any previously authorized equipment for use under Amateur Service rules, the League asserted. The proceeding attracted many comments regarding this aspect of the proceeding, although the proposed rules differ only slightly from the current rules.

The ARRL also urged the FCC not to apply any limitations proposed for Software Defined Radios to SDRs intended for use exclusively in the Amateur Radio Service, "as has been the policy for the past 10 years."

Equipment Authorization

The League also has called on the Commission not to combine the Declaration of Conformity (DoC) and Verification equipment authorization procedures into a single, self-approval program. The League said the proposal could lead to abuse by unscrupulous importers and manufacturers of unintentional emitters. Under the proposed rules, the FCC would do away with its DoC authorization program by combining it with equipment Verification to form a so-called "Suppliers Declaration of Conformity" category of equipment authorization. Testing in an accredited laboratory would not be required, nor would database registration or third-party review. The ARRL expressed concerns that the new regime would encourage and facilitate the introduction into the US of "non-compliant unintentional emitters" and offer no oversight.

The ARRL's comments said, "The only opportunity to preclude widespread sale and deployment of non-compliant RF devices, including unintentional emitters, is via the equipment authorization process." The League said hams and AM broadcasters have been victims of interference from such unintentional emitters as RF lighting ballasts "that routinely exceed the Commission's conducted emission limits." The ARRL said the solution is "not to loosen but to tighten the procedural controls over the testing and affirmative confirmations of

compliance" to ensure greater compliance in conducted limits and other technical parameters that determine how much such devices contribute to ambient noise levels.

The League said some RF devices, such as RF "grow lights," now subject to the more informal Verification process should be subject to Certification, owing to their substantial interference potential. The ARRL noted that it has received and investigated "numerous reports of interference" from devices subject only to Verification. "A number of interfering devices, when tested by the ARRL Laboratory, have been found to exceed the FCC limits, sometimes by an alarming amount," the League said.

Improved Labeling for Part 15 and Part 18 Devices

The ARRL also said there is "an urgent need" for improved labeling requirements for certain Part 15 and Part 18 devices. "Necessitating change, notably, is the fact that there are many industrial Part 18 devices sold that are neither intended nor designed for use in residential environments, but because there is no external labeling...the end user consumer is left without guidance," the ARRL said, noting that, in most cases, equipment retailers are not providing any either.

In July, the ARRL complained to the FCC about the marketing practices of various "big box" retailers, where non-consumer-rated lighting ballasts have been mixed in with consumer ballasts and other consumer products on display with no explanatory signage. Ballasts intended for industrial applications have higher permitted conducted emission limits in the Amateur Radio HF spectrum. The League called on the FCC to include a definition in Part 18 for the term "consumer RF lighting device," to provide a way to differentiate consumer devices from those intended for industrial or commercial environments.

The League also said the FCC should consider reducing its Part 15 limits for lighting devices to correspond with the Part 18 lighting device limits between 3 and 30 MHz to reduce the RFI potential of LED bulbs now being widely marketed, "before they become an aggregate problem." LED lamps operate under Part 15 rules.

The ARRL said the FCC should adopt the League's new equipment-labeling proposals with respect to certain Part 15 and Part 18 equipment "in order to stop the flood of such devices intended for commercial or industrial areas only into residential areas."

NNNN
/EX

73!
Bill AB9TA

INDIANA HAMFESTS

Nov. 14-15 Indiana State Convention, Fort Wayne Hamfest & Computer Expo, Allen County War Memorial Coliseum, Fort Wayne, <http://www.fortwaynehamfest.com>

That's all of the Indiana Hamfests for this year.

MID-STATE AMATEUR RADIO CLUB

The Mid-State Amateur Radio Club meets the **THIRD SATURDAY** of each month in the basement of the Johnson County Law Enforcement Center, Conference Room 1111 Hospital Road, Franklin, Indiana 46131.

See our website, www.midstatehams.org, for maps on how to get to our meeting.

Everyone is welcome; you do not have to be a *HAM* to attend our meetings or a member of the club.

WA9RDF Repeaters:

146.835/
146.235 MHz
(151.4 Hz PL Tone)

WA9RDF Repeater:

443.525/
448.525 MHz
(151.4 Hz PL Tone)

Club Officers:

President: Jacki Frederick – KI6QOG
Vice President: Bruce Tisdale -- K9ICP
Secretary: Rhonda Curtis – WS9H
Treasurer: Cy Young – N9CHY
Repeater Trustee - Chris Frederick – KQ9Y

Weekly Net: Sunday evening 7:00 PM ARES/RACES members and ALL RADIO AMATEURS
146.835/146.235 MHz (151.4 Hz PL Tone)

The Official Newsletter of the Mid-State Amateur Radio Club

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Editor: Robert LaGrange N9SIU

Please send your articles to my email: n9siu@yahoo.com no later than the 3rd of the month

